

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

ZAVARZIN, A. A.

"Histological Investigation of the Seminal Ducts." Cand Biol Sci, First
Leningrad Medical Inst, Leningrad, 1953. (RZhBiol, No 7, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (16).

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CIA-RDP86-00513R001964010005-5"

ZAVARZIN, A. A.

6939. ZAVARZIN, A. A. i SHCHELKUNOV, S. I. Rukovodstvo po gistologii.

Uchebnik dlya med. in-tov Izd. 7-ye, pererabot. i dop. L., Medgiz,
Lenin-gr. otd-niye, 1954. 700s. s ill.; 16 l.ill. 27 sm. 50.000 ekz.

22 r. 65 k. V per.— [55-2774]

6-ye izd: A. A. Zavarzin i A. V. Rumyantsev.

Kurs gistologii

611-018+576

Knizhnaya Letopis' No.6, 1955

ZAVARZIN, A. A.

SVETLOV, P.G.; ZHINKIN, L.N.; ZAVARZIN, A.A.

In memory of Fedor Mikhailovich Lazarenko. Test MN SSSR no.2:
77-78 '54. (MLBA 7:7)
(LAZARENKO, FEDOR MIKHAILOVICH, 1888-1953)

AUTHOR ZAVARZIN, A.A., EX-10010000 20-4-53/61
TITLE The Investigation of the Epithelium of Vas Deferens by the method of
Tissue and Organ Culture within the Organism.
(Issledovaniye epiteliya semevynosyashchikh putey metodom kul'tiviro-
vaniya tkaney i organov v organizme - Russian)
PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 4, pp 913-916, (U.S.S.R.)
Received 6/1957 Reviewed 8/1957
ABSTRACT The method of tissue and organ culture in the organism was successfully
applied in the investigation of the epithelium tissues. It was intere-
sting to employ this method when settling complicated problems of the
biological properties and the origin of the vasa deferentia and of the
canal of the epididymis. Most of the researchers of embryology speak of
the mesodermal nature of the tissues forming them. Histologists on the
other hand, attribute an ectodermal origin to the epithelium coating
them. Others, however, regard the vasa deferentia as a mesodermal epi-
thelium of the canal of the epididymis. The author investigated the
problem on rabbits. As is well known, the implanted pieces of tissue, to-
gether with sterile pieces of celloidin, cause a continuous aseptic in-
flammation. During the inflammation process the implanted tissues in strict
conformity and synchronously with the new formed connective tissues of
the host organism pass through the following transformation cycle which
is conventionally devided into 4 periods. 1) Depression, 2) activation
and proliferation, 3) differentiation and 4) regression. This was the case
also in the experiments carried out by the author. However, a number or
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The Investigation of the Epithelium of Vas Deferens
by the Method of Tissue and Organ Culture within the Organism.

~~SECRET~~

20-4-53/61

peculiarities could be disclosed which are described in detail. The results obtained show that the kinds of epithelium of the vasa deferentia and of the canal of the epididymis, which are different from each other, have a number of common properties. It was possible to disclose a number of structural peculiarities which distinguish the epithelium of the canal of the epididymis sharply from the corresponding structures and processes observed in the organism on the occasion of culture of epithelia of ectodermal origin. On the basis of this knowledge it seems to the author - in contrast to the opinions of the above mentioned authors - that a mesodermal nature of the kinds of epithelium is more probable. The essential differences between the two kinds of epithelium under consideration are to be explained from this point of view by their origin from different parts of the mesonephros and by the difference of their functional activity. Furthermore, results indicate that, when solving the question of the nature of the investigated epithelia experimentally, the specifics of the intertissual relations with the wall of the investigated organism have to be taken into account. Obviously they can play a very essential part on the occasion of transformation of epithelium tissues in organs of nephro-dermal origin.

(With 3 illustrations, 5 citations from Slavic publications).

Card 2/3

The Investigation of the Epithelium of Vas Deferens by the method of
Tissue and Organ Culture within the Organism.

20-4-53/61

ASSOCIATION First Leningrad Medical Institute.
PRESENTED BY ANICHKOV, N.N., Member of the Academy.
SUBMITTED 22.11.1956.
AVAILABLE Library of Congress.
Card 3/3

Chivrichuk, A.A.

AUTHOR ZAVARZIN A.A. 20-5-55/67
TITLE On the Histogenesis of Ductuli Efferentes and Ductus
Epididymis in Mammals and in Man. (K voprosu o gistogeneze
semevynosyashchikh putey mlekopitayushchikh i cheloveka.-
Russian)
PERIODICAL Doklady Akademii Nauk SSSR 1957, Vol 113, Nr 5, pp 1143-1146
(U.S.S.R.)
ABSTRACT There are great contradictions in publications on this question
as regards the origin of the formation of the epithelial
lining of these ducts. They are explained to a great extent
by insufficient research of complicated change- and reconstruc-
tive processes in the course of embryonal histogenesis. The
spermatic ducts of pigs were chosen for histological study in
early stages, whilst human material was used for the investi-
gation of later stages. The premordial kidney of pigs shows
a maximum development in the stage of 1,5 months. Its tissues
are functionally differentiated to a great extent e.g. the
epithelial lining of the uriniferous tubes, the Malpighian
bodies and the Wolffian duct. This differentiation apparently
covers several generations of cells. Probably this differenti-
ation is also of functional importance and is not only dependent
on the phylogenetic development, as between the leaflets of the

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20-5-55/67

On the Histogenesis of Ductuli Efferentes and Ductus Epididymis in Mammals and in Man.

capsule of the kidney as well as in the lumen of the little ducts and that of the Wolffian duct excretory droplets exist. Up to an age of 5,5 months the spermatic ducts of man grow longitudinally and then a process of differentiation sets in. The investigations carried out extended our knowledge on the histogenesis of spermatic ducts. Their special character is the replacement of excretory activity by the function of a peculiar gland and the screening device for spermatozooids. The results reached with pigs do not show full agreement with W. FELIX, who regards the differentiation mentioned above to be only the recapitulation of the phylogenesis of the organ. The analysis of histological reconstructive pictures made it possible to give an approximated explanation of the complicated mechanism of processes which occur in the epithelium of the premordial kidney. Besides being of special interest, these findings are also of general importance as an example of the plasticity of even highly differentiated kinds of tissues. The investigation in question did not supply any convincing confirmation the suggestions made in publications as to the ectodermal origin of its epithelial lining.

CARD 2/3

20-5-55/67

On the Histogenesis of Ductuli Efferentes and Ductus
Epididymis in Mammals and in Man.

(1 illustration from 3 pictures, 2 citations from Slavic
publications)

ASSOCIATION: Leningrad Medical Institute "I.P. PAVLOV"

PRESENTED BY: ANICHKOV N.N., Member of Academy.

SUBMITTED: 22.21. 1956.

AVAILABLE: Library of Congress.

CARD 3/3

ZAVARZIN, A. A.

AUTHORS: Dondua, A. K., and Zavarzin, A. A. 20-5-51/54

TITLE: An Experimental-Morphological Investigation of Embryonic Perisperms in Rats (Eksperimental'no - morfologicheskoye issledovaniye zarodyshevykh obolochek krysa).
SSSR,

PERIODICAL: Doklady Akademii Nauk 1957, Vol. 115, Nr 5, pp. 1033-1036 (USSR).

ABSTRACT: The amniotic membrane and the yolk bag of rat embryos aged 10-13 days were investigated. Reactive changes were caused in them by the introduction of foreign bodies (celloidin needles, kieselgur, ink, coal tar, and pieces of living suprarenal and cartilaginous tissues mixed with celloidin particles). Among about 700 operated embryos, only 70 were fit to be examined. The reaction of the tissues to these foreign bodies is described in detail. The results obtained by this work made it possible to disclose the reactive powers of the mesenchyme of the yolk bag and of the amnion, which under normal conditions, cannot be observed. On this occasion some peculiarities of the reactive change of the mesenchyme of each of these envelopments was explained. These peculiarities are partly due to a higher (in the case of the yolk bag) or lower (amnion) degree of difference in their mesenchyme. Such specific processes

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An Experimental Morphological Investigation of Embryonic Perisperms in Rats.

20-5-51/54

as a reactive growing in of the vessels and the mesenchyme of the yolk bag and the mesenchymal proliferation of the amnion are due to functional and biological peculiarities of these cells.
There are 4 figures and 1 Slavic reference.

ASSOCIATION: Institute for Experimental Medicine of the USSR/^{Academy of Medical Sciences} eksperimental'noy meditsiny Akademii meditsinskikh nauk SSSR). Leningrad State University imeni A. Zhdanov (Leningradskiy gosudarstvennyy universitet imeni A. A. Zhdanova).

PRESENTED: By N. N. Anichkov, Academician, March 18, 1957

SUBMITTED: March 4, 1957.

AVAILABLE: Library of Congress.

Card 2/2

DONDUA, A.K.; ZAVARZIN, A.A.

Reactive changes in the fetal membranes of white rats [with
summary in English]. Vest. IgU 13 no.9:83-94 '58. (MIRA 11:6)
(Fetal membranes)

ZAVARZIN, A.A.

Effect of a naftalan petroleum extract on the embryonic epidermis
and on its inclusion of radiosulfur. Biul. ekspr. biol. med. 47 no.5:
100-104 My '59.
(MIRA 12:7)

1. Iz laboratorii gistologii (zav. - prof. L.N. Zhinkin) Instituta
eksperimental'noy meditsiny (dir. - chlen-korrespondent AMN SSSR D. A.
Biryukov) AMN SSSR, Leningrad. Predstavlena deystvitel'nym chlenom
AMN SSSR N. G. Khlopinym.

(SKIN, embryology,

eff. of naphthalan petroleum extract on embryonic epidermis
& on radiosulfur inclusion (Rus))

(SULFUR, radioactive,

inclusion by rat embryonic epidermis, eff. of naphthalan
petroleum extract (Rus))

(PETROLEUM PRODUCTS, eff.

naphthalan petroleum extract, eff. on embryonic epidermis
& on radiosulfur inclusion (Rus))

ANDREYEVA, L.F.; LONDUA, A.K.; ZAVARZIN, A.A.

Study of RNA synthesis during cell differentiation by the
methods of fractional extraction and autoradiography.
Sbor. rab. Inst. tsit. no.5:102-120 '63. (MIRA 17:2)

1. Laboratoriya morfologii kletki Instituta tsitologii i
Laboratoriya embriologii Biologicheskogo nauchno-issledovatel's-
kogo instituta Leningradskogo gosudarstvennogo universiteta.

ZHINKIN, L.N., oty. red.; ZAVARZIN, A.A., oty. red.

[Study of cellular cycles and nucleic acid metabolism during the differentiation of cells] Issledovanie kletochnykh tsiklov i metabolizma nukleinovykh kislot pri differentsiatsii kletok. Moskva, Nauka, 1964. 171 p.
(MIRA 18:1)

1. Akademiya nauk SSSR. Institut tsitologii.

ALEKSANDROV, V.Ya., prof.; BRODSKIY, V.Ya.; BRONSHTEYN, A.A.;
BRUMBERG, Ye.M.; VAKHTIN, Yu.B.; VINNIKOV, Ya.A.;
GAYTSKHOKI, V.S.; GOROSHCHENKO, Yu.L.; GULAYEV, V.A.;
ZHINKIN, L.N.; ZAVARZIN, A.A.; ZALKIND, S.Ya.; ZBARSKIY,
I.B.; KATSNEL'SON, Z.S.; KONISSARCHIK, Ya.Yu.; LEVIN, S.V.;
MARAHOVA, I.I.; MASHANSKIY, V.F.; MOSEVICH, T.N.; NIKOL'SKIY,
N.N.; PESHKOV, M.A.; POLENOV, A.A.; POLYANSKIY, Yu.I.;
ROZENTAL', D.L.; RUMYANTSEV, F.P.; TITOVA, L.K.; FEDIN, L.A.;
KHEYSIN, Ye.M.; CHERNOGRYADSKAYA, N.A.; TROSHIN, A.S., otv.
red.; MEYSEL', M.N., red.; MIKHAYLOV, V.P., red.; NEYFAKH,
S.A., red.; PARIBOK, V.P., red.; POLYANSKIY, Yu.I.; red.;
RAYKOV, I.B., red.

[Manual on cytology in two volumes] Rukovodstvo po tsitologii v
dvukh tomakh. Moskva, Nauka, Vol.1. 1965. 571 p.
(MIRA 18:2)

1. Akademiya nauk SSSR. Institut tsitologii.

ZHINKIN, L.N.; ZAVARZIN, A.A.

Radioautographic study of the incorporation of radioactive sulfur
of sodium sulfate, mercamine and methionine. Biofizika 5 no. 6:734-
739 '60. (MIRA 13:10)

1. Institut eksperimental'noy meditsiny AMN SSSR, Leningrad.
(AUTORADIOGRAPHY) (SULFUR IN THE BODY)

ZHINKIN, L.N.; ZAVARZIN, A.A. (Leningrad); DONDUA, A.K. (Leningrad)

Use of tritium-labeled compounds in autoradiography. TSitologija
2 no. 61625-639 N-D '60. (MIRA 13:12)
(TRITIUM) (AUTORADIOGRAPHY)

ZAVARZIN, A.A.; PLOTNIKOVA, S.I.

Autoradiographic and histochemical investigation of neurogenous
trophic ulcers in the abdominal wall of the rabbit. Dokl.
AN SSSR 140 no.5:1185-1188 O '61. (MIRA 15:2)

1. Institut eksperimental'noy meditsiny AMN SSSR, Institut
tsitologii AN SSSR i Institut evolyutsionnoy fiziologii AN
SSSR. Predstavлено akademikom N.N.Anichkovym.
(ULCERS)

ZHINKIN, L.N.; ZAVARZIN, A.A.; LEBEDEVA, G.S.; ANDREYEVA, L.F.

Use of liquid emulsions in autoradiography with thymidine-H³ and adenine-C¹⁴. Tzitologija 3 no.4:478-481. Jl-Ag '61. (MIRA 14:8)

1. Laboratoriya morfologii kletki Instituta tsitologii AN SSSR,
Leningrad.

(AUTORADIOGRAPHY)

ZAVARZIN, A.A. (Leningrad, P-22. Kirovskiy pr., 69/71, kv.15)

Correlation of the intensity of protein and nucleic acid metabolism
and mitotic activity during the proliferation and differentiation
of the epidermis. Arkh. anat. hist. i embr. 40 no.5:18-26 Mr '61.
(MIRA 15:4)

1. Laboratoriya histologii (zav. - prof. L.N.Zhinkin) Instituta
eksperimental'noy meditsiny AMN SSSR.
(EPIDERMIS) (PROTEIN METABOLISM) (NUCLEIC ACIDS)
(KARYOKINESIS)

ZAVARZIN, A.A. (Leningrad, P-22, Kirovskiy pr., 69/71, kv.73)

Study of the differentiation of epithelium in the oral cavity in embryogenesis. Arkh. anat. hist. i embr. 41 no.12:89-98 D '61. (MIRA 15:3)

1. Laboratoriya morfologii kletki (zav. - prof., I.I. Sokolov)
Instituta tsitologii AN SSSR.
(MOUTH) (EPITHELIUM)

ZAVARZIN, A.V.

Report on the work of the Leningrad branch of the All-Russian Society
of Epidemiologists, Microbiologists and Specialists in Infectious
Diseases during 1958. Zhur.mikrobiol.epid.i immun. 30 no.7:155-157
Jl '59. (MIRA 12:11)
(LENINGRAD--PUBLIC HEALTH SOCIETIES)

TARARIN, R. A., polkovnik meditsinskoy sluzhby; ZAVARZIN, A. V., pod-polkovnik meditsinskoy sluzhby

Conference on theoretical considerations in relation to the problem
problem of reducing and eliminating epidemic diseases. Voen.-
med. zhur. no.12:77-78 D '61. (MIRA 15:7)

(COMMUNICABLE DISEASES—PREVENTION)
(MEDICINE, MILITARY)

ZAVARZIN, A.V.

Occurrences of brannerite in quartz-pyrite-sericitic metasomatic bodies. Geol.rud.mestorozh. no.6:54-58 N-D '61.

(MIRA 14:12)

(Brannerite)

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CIA-RDP86-00513R001964010005-5

GOLUREV, D.B.; ZAVARZIN, A.V.

Data from the study of an outbreak of epidemic hepatitis in pre-school children. Zhur.mikrobiol., epid.i immun. 32 no.12:12-15
D '61. (MIRA 15:11)

(HEPATITIS, INFECTIOUS)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

ZAVARZIN, A.V.

Report on the work of the Leningrad Section of the All-Russian Medical Society of Epidemiologists, Microbiologists, and Infectious Disease Specialists for 1960. Zhur. mikrobiol. epid. i immun. 32 no.7:153-155 Je '61.
(MICROBIOLOGICAL SOCIETIES)

ZAVARZIN, G.A.

Bacteriology of the surface stratum in natural water supply
of the Volga Delta. Trudy Inst.mikrobiol. no.4:196-201 '55.

(WATER SUPPLY, bacteriology, (MLRA 9:1)

in Volga Delta, surface stratum of natural water
supply)

(BACTERIA,
in water supply in Volga Delta)

KUZNETSOV, S.I.; KARZINKIN, G.S.; YEGOROVA, A.A.; KASTAL'SKAYA, M.A.;
KARASIKOVA, A.A.; IVANOV, M.V.; ZAVARZIN, G.A.; DERYUGINA, Z.P.

Rigid vegetation as green fertilizer for increasing the productivity of fish farms. Vop.ikht. no.5:119-137 '55. (MLBA 9:5)

1. Institut mikrobiologii Akademii nauk SSSR i Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii, VNIRO.
(Fish culture)

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the course of 1-4 day events. The phenomenon usually
occurs without notice & often it this stage does not

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CIA-RDP86-00513R001964010005-5

ZAVARZIN, G.A.

Possibility of heterotrophic metabolism in nitrifying bacteria.
Mikrobiologija 25 no.5:619-628 S-0 '56. (MLRA 10:1)
(NITROSOCHLORAS, metabolism,
heterotrophic, review (Rus))

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

AUTHOR:

ZAVARZIN, G.A.

20-6-50/59

TITLE:

The Participation of Molybdenum in the Oxidation of Nitrites by Nitrifying Bacteria. (Uchastiye molibdema v okislenii nitritov nitrifitsiruyushchimi bakteriyami, Russian)

PERIODICAL:

Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 6, pp 1361-1362
(U.S.S.R.)

ABSTRACT:

Alimentary Physiology of nitrification bacteria has been investigated only in a general manner up to now. We know that they need Ca and Mg besides the biogenic main elements. Fe stimulates the oxidation of the nitrite by a Nitrobacter-strain if it occurs with an amount of 6 mg/l and more. It was, however, not possible to prove a stimulation of Mn and Cu. A retardation of nitrification or its complete standstill was observed in the case of a culture of the bacillus of the second nitrification stage on a medium which contained magnesium- and ferrous sulphate besides nitrite of sodium and chloride of sodium. An addition of molybdate compensated this effect completely, and the nitrite was oxidized just as quickly as on tap water. Molybdic ammonium could not serve as substitute although it did not show harmful effects. In most cases the influence of molybdenum showed an effect on the acceleration of nitrification. Tests carried out with growing cultures did not make it possible to decide whether molybdenum takes part in the propagation processes of the cells. Therefore short tests with

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The Participation of Molybdenum
in the Oxidation of Nitrites by Nitrifying Bacteria.

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nitrite-oxidation were carried out. The nitrifier culture was grown without molybdenum. 2 - 3 times the period of a normal culture was necessary for complete nitrite-oxidation. The author succeeded in observing the nitrification by molybdenum only at the beginning of the stationary stage of the cultures grown without molybdenum. Although the results achieved differed greatly because of the difficulty of producing cultures weakened to the same extent, it may be said that molybdenum takes part especially in nitrite oxidation. In the course of recent years the participation of molybdenum in the metabolism of inorganic nitrogen was discovered, especially in the stage of the nitrate-reductase system of fungi and plants of higher order. This ferment proved to be a molybdenum-flavoprotein. Apparently, molybdenum takes part in the metal-flavoprotein of the bacillus of the second nitrification stage, as it was possible to accelerate the stimulation of nitrite-oxidation to a greater extent if riboflavin was added together with molybdenum. (1 illustration)

ASSOCIATION: Institute for Microbiology of the Academy of Science of the U.S.S.R.
PRESENTED BY: A.I.OPARIN, Member of the Academy
SUBMITTED: 27.1.1957
AVAILABLE: Library of Congress
Card 2/2

ZAVARZIN, G.A., Cand Bio Sci—(disc). "The ^{The taught stage?} ~~stages~~ of the second phase of nitrification." Mos, 1958. 14 pp (Inst of Microbiology, Acad Sci USSR), 130 copies (KL,45-58, 144)

-51-

ZAVARZIN, G.A.

Agents initiating the second phase of nitrification. Part 2:
Effect of heavy metals on nitrification [with summary in English].
Mikrobiologija 27 no.5:542-546 S-O '58 (MIRA 11:12)

1. Institut mikrobiologii AN SSSR:
(NITROBACTER, effect of drugs on,
heavy metals on nitrification (Rus))
(METALS, effects
same (Rus))

ZAVARZIN, G.A.

Organism inducing the second phase of nitrification. Part 3:
Morphology of the organism inducing the second phase of nit-
rification [with summary in English]. Mikrobiologija 27 no.6:
679-686 N-D '58. (MIRA 12:1)

1. Institut mikrobiologii AN SSSR.
(NITROBACTER,
isolation & morphol. (Rus))

ZAVARZIN, G.A.

"Biochemistry of autotrophic bacteria" by H. Lees. Reviewed by G.A.
Zavarzin. Mikrobiologija 28 no.3:471-472 Ky-Je '59. (MIRA 13:3)
(BACTERIA, AUTOTROPHIC) (LMES, H.)

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

KASATKINA, I.D.; ZAVARZIN, G.A.

"Outlines of enzyme chemistry" [in English] by J.B. Neelands, P. Stumpf.
Reviewed by I.D. Kasatkina, G.A. Zavarzin. Mikrobiologija 28 no.4;
628-629 J1-Ag '59.

(ENZYMES)

(MIRA 12:12)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

ZAVARZIN, G.A.

The developmental cycle and nuclear apparatus of *Hypomicrobium vulgare* Stutz. et Hartleb. *Mikrobiologija* 29 no.1:38-42 Ja.-P '60.
(MIRA 13:5)

1. Institut mikrobiologii AN SSSR.
(HYPOMICROBIVUM)

ZAVARZIN, G.A.

Incitant of the second phase of nitrification. Report No.4:
Dehydrogenase activity of the washed suspension of Nitrobacter
winogradsky i Buch. Mikrobiologija 29 no.5:657-660 S-0 '60.

1. Institut mikrobiologii AN SSSR.
(BACTERIA, NITRIFYING) (DEHYDROGENASES) (MIRA 13:11)

ZAVARZIN, O. A.

Symbiotic culture of a new manganese-oxidizing micro-organism.
Mikrobiologija 30 no.3:393-395 My-Je '61. (MIRA 1517)

1. Institut mikrobiologii AN SSSR.

(MANGANESE) (MICRO-ORGANISMS)

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

ZAVARZIN, G.A.

Budding bacteria. Mikrobiologija 30 no.5:952-975 S-0 '61.
(CAULOBACTERIALES) (MIRA 14:12)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

ZAVARZIN, G.A.

Symbiotic oxidation of manganese by two *Pseudomonas* species.
Mikrobiologija 31 no.4:586-588 Jl-Ag '62.

1. Institut mikrobiologii AN SSSR.

(MIRA 18:3)

YEFIKHINA, V.V.; ZAVARZIN, G.A.

Oxidation-reduction potential in the development of Metallo-
genium. Mikrobiologija 32 no.2:227-230 Mr-Apr '63.

(MIKA 17:9)

1. Institut mikrobiologii AN SSSR.

ZAVARZIN, G.A.; YEFIKHINA, V.V.

Symbiotic growth of Metallogenium. Dokl.AN SSSR 148 no.4:933-
934 F '63. (MIRA 16:4)

1. Institut mikrobiologii AN SSSR. Predstavлено академиком
A.A.Imshenetskim.
(SYMBIOSIS) (MICRO-ORGANISMS) (MANGANESE)

ZAVARZIN, G.A.

Structure of metallogenium. Mikrobiologija 32 no.6:1020-1023
N-D '63 (MIRA 18:1)

1. Institut mikrobiologii AN SSSR.

ZAVARIN, G.A.

Mechanism of manganese precipitation on the shells of
mollusks. Dokl. AN SSSR 154 no.4:944-945 F '64.

(MIRA 17:3)

1. Predstavлено академиком А.А. Имшенетским.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

ZAVARZIN, G.A.; ZHILINA, T.M.

Thiobacteria from thermal springs. (Mikrobiologija 33 no.5:
844-850 S-0 '64. (NIKA 18:3)

1. Institut mikrobiologii AN SSSR.

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

ZAVARZIN, G.A.

Types of nutrition of micro-organisms. Usp. mikrobiol. 1:30-60
'64. (MIRA 18:9)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

RABOTNOVA, I.L.; ZAVARZIN, G.A.

Reviews. Mikrobiologija 34 no.2:374-376 Mr-Ap '65.
(MIRA 18:6)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

ZAVARZIN, G. A.

"Manganese and soil bacteria."

report submitted for Symp on Ecology of Soil Bacteria, Liverpool, UK, 6-10 Sep 1965.

DOMAN, N.G.; VASIL'YEVA, Z.A.; ROMANOVA, A.K.; ZAVARZIN, G.A.

Assimilation of carbon of monocarboxylic compounds by budding
bacteria Hyphomicrobium vulgare Stuts. et Hartleb. Mikrobi-
logiia 24 no.1:3-11 Ja-F '65. (MIRA 18:7)

1. Institut biokhimii AN SSSR imeni A.N. Bakha i Institut mikro-
biologii AN SSSR.

ZAVARZIN, G.A.

System of thiobacteria. Izv. Ak SSSR. Ser. biol. no.2:287-290
Mr-Ap '65. (MIRA 18:4)

I. Institute of Microbiology of the Academy of Sciences of the
U.S.S.R., Moscow.

ZAVARZIN, G.A.; STARK, Yu.S.

Analysis of forbidden variants in the taxonomy of micro-
organisms. Izv. AN SSSR. Ser. biol. no.5:766-768 S-O '65.
(MIRA 18:9)

1. Institut mikrobiologii AN SSSR, Moskva.

S/169/62/000/007/017/149
D228/D307

AUTHORS: Babayants, S. P. and Zavarzin, G. N.

TITLE: Application of geophysical methods when geologically surveying enclosed areas on a scale of 1:200,000

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 7, 1962, 19, abstract 7A123 (Razvedka i okhrana nedr, no. 8, 1961, 31-36)

TEXT: A complex of geophysical methods was applied to increase the effectiveness of geologic surveying (scale of 1:200,000) on the eastern slope of the Turgayskiy Trough, where almost all the area is covered by thick loose Meso-Cenozoic deposits. Electric surveying by the method of vertical electric sounding was carried out in order to determine the thickness of the Meso-Cenozoic deposits and their lithologic separation, and also to study the relief of Paleozoic rocks and map them. Gravity surveying was applied to map the Paleozoic basement structures, and magnetic surveying was employed to separate the basement rocks lithologically. It was established ✓

Card 1/2

Application of geophysical ...

S/169/62/000/007/017/149
D228/D307

that against the background of the basement's generally gentle westwards subsidence there are local depressions and rises. It was established from geophysical data that Lower Paleozoic rocks, forming the core of the Dzharkainagachskiy Anticlinorium, have a north-easterly strike; further to the south their strike is close to meridional. Previously known tectonic elements were defined more precisely, and a new structure -- the Karyn-Saldinskaya Trough -- was exposed. A magnetic anomaly with an intensity of 1000 γ was fixed in the section's north-west part; this was confirmed by gravimetric data. The anomaly is presumed to be due to a deep-lying intrusion of basic or ultrabasic composition. *[Abstracter's note: Complete translation.]*

Card 2/2

BABAYANTS, S.P.; ZAVARZIN, G.N.

Using geophysical methods to search for Kazakhstan Mesozoic bauxites.
Razved. i okh. nedr 28 no.2:28-34 F '62. (MIRA 15:3)

1. Iliyskaya geofizicheskaya ekspeditsiya.
(Kazakhstan--Bauxite) (Prospecting--Geophysical methods)

ZAVARZIN, L.G., CHERNYSHEVA, V.Ye.

New data on the Cambrian of the Yenisey Range. Geol. i geofiz.
no. 3e148-151 '65. (MIRA 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut,
Leningrad.

ZAVARZIN, L.G.; BLAGOVESHCHENSKAYA, M.N.

Ordovician sediments in the upper Kamenka Valley and some
geological characteristics of this region. Inform.sbor.VSEGEI
no.40:29-33 '60. (MIRA 14:12)
(Kamenka Valley (Krasnoyarsk Territory)—Rocks, Sedimentary)

ANDREYEVA, L. F., DONDUA, A. K. and ZAVARZIN, A. A.

"The Application of Autoradiography to the Study of the Characteristics
of RNA Synthesis in Tissue Differentiation." pp. 2

Institute of Cytology AS USSR Laboratory of Cell Morphology, Chair of
Embryology of Leningrad University

II Nauchnaya Konferentsiya Instituta Tsitologii AN SSSR. Tezisy Dokladov
(Second Scientific Conference of the Institute of Cytology of the Academy
of Sciences USSR, Abstracts of Reports), Leningrad, 1962. 88 pp.

JPRS 20,634

YERGALIYEV, A.Ye.; YURKOV, V.H.; ABEDIMOV, A.Zh.; ZAVARZIN, V.G.; VERSHININA, V.V.

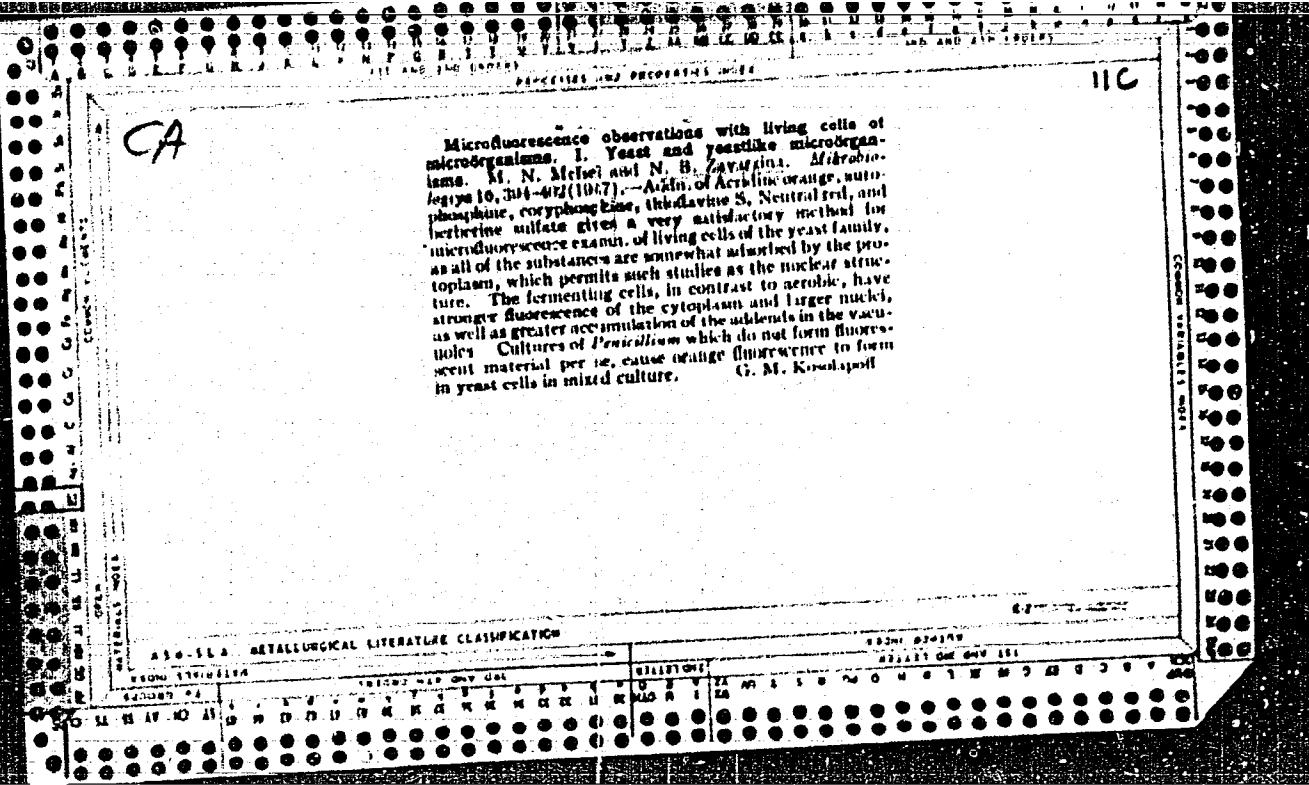
Study of the electrochemical method of fastening loams and clays.
Trudy Alt. GMNII AN Kazakh. SSR 15:48-52 '63. (MIRA 17:3)

ZAVARZIN, V. I., Cand Bio Sci -- "Functional disease of the peach tree in Moldavia." Kishinev, 1961. (Min of Higher and Sec Spec Ed USSR. Com of Higher and Sec Spec Ed of the Council of Ministers MSSR. Kishinev State U) (KL, 8-61, 236)

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- 44 -

CP

The action of carcinogenic hydrocarbons on microorganisms. M. N. Mel'cet and N. B. Zavargina. Zhur. Obshchey Biol. (J. Gen. Biol.) 8, 83-97 (1947). Izdat. Med. 32, 360 (1948).—The action of dibenzanthracene, benzo(a)pyrene, and methylcholanthrene (I) on microorganisms (apparently mainly yeasts) was determined. The microorganisms took up large amounts of the carcinogens from the medium, and upon cell division, passed the compds. on to the daughter cells. At first, fermentation was activated and respiration was inhibited, except with high concns. which inhibited both forms of biochem. action. In the cells, the hydrocarbons mainly accumulated in lipoidal structures. Prolonged contact of yeast cells with dibenzo(a,p)pyrene or I produced modified hereditary forms, mainly giant cells. The carcinogens stimulated the formation and germination of spores. In *Saccharomyces ludwigii*, they produced a copulation of spores, giving rise to aberrant forms of cells. W. C. Tolosa



"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

KRIVISKII, A.; RUBAN, Ye.; VAYSFEL'D, I.; ZAVARZINA, N.; REKERTSEV, V.;
BELOUSOVA, N. [abstracters].

Abstracts [of foreign literature]: general microbiology, physiology
and biochemistry. Mikrobiologiya 32 no.6:744-751 N-D '53. (MLRA 6:12)
(Microorganisms)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

ZAVARZINA, N.B.

Study of causes stimulating or inhibiting the development of
phytoplankton. Trudy Gidrobiol. ob-va no.6:104-109 '55.
(MLRA 8:9)

1. Institut mikrobiologii Akademii Nauk SSSR
(Phytoplankton)

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

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CIA-RDP86-00513R001964010005-5"

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

ZAVARZINA, N.B.

Results of the microbiological analysis of oozes of Lake Ushchemerovo.
Trudy Lab.sapr.otl. no.6:110-114 '56. (MIRA 9:11)
(Ushchemerovo, Lake--Micro-organisms)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

15-57-12-17244

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 12,
p 76 (USSR)

AUTHOR: Zavarzina, N. B.

TITLE: Distribution of Microorganisms in the Silt Deposits
of Lake Nero (Raspredeleniye mikroorganizmov v ilovykh
otlozheniyakh ozero Nero)

PERIODICAL: Tr. Labor. sapropel. otlozheniy In-t lesa SSSR, 1956,
Nr 6, pp 168-172

ABSTRACT: The significance of microorganisms is determined by
their participation in the processes of mineralizing
organic matter in the deposits of silt. It is pro-
posed that Lake Nero deposits be utilized as soil
conditioners for agricultural purposes. In studying
the rate of mineralization, it is necessary to learn
the qualitative bacterial content involved in the
process. The following conclusions were arrived at

Card 1/2

Distribution of Microorganisms (Cont.)

15-57-12-17244

from this investigation: Ammonium producing bacteria form the most widely distributed group and are encountered in all varieties; other groups of bacteria are concentrated in the upper layer of sapropel down to the depth of 1 m. The presence of a microbiologically active layer at the depth of 3.6 m is explained either by the influence of a deeper layer of clay with a large admixture of humus, or by some unusual conditions of this layer itself.

Card 2/2

T. A. Gretskaya

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

ZAVARZINA, N.B.

17(4)

AUTHORS: Zavarzina, N. B., Protzenko, A. Ye. BOV/20-122-5-52/56

TITLE: On the Lysis of Chlorella Pyrenoidosa Pringh Cultures
(O lizise kul'tur Chlorella pyrenoidosa Pringh)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 5, pp 936-939
(USSR)

ABSTRACT: In mass cultures of protococcus algae (Ref 1) sometimes the lysis of actively growing cultures occurred which was completed within a few hours. N. S. Gayevskaya (Ref 1) is of the opinion that lysis can occur due to an incomplete digestion of the algae in the bowel of animal organisms. The authors are, however, of the opinion that this lysis can occur 1) By the unorganized effect of some ferment of the algae in the mass injury of cells (as Ref 1), 2) By the antagonistic effect of products of the life activity of bacteria formed in the culture of algae, and 3) By a specific agent that lysates an active alga culture. The lysis of Chlorella pyrenoidosa also observed by the authors was seen on a strain from the Muzey kul'tur vodorosley (Museum for Algae Cultures) of Praha University. They were cultivated on a mineral medium. The task of the work was to explain the cause of this lysis. The

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On the Lysis of Chlorella Pyrenoidosa Pringh
Cultures

SOV/20-122-5-52/56

authors found a specific lysating factor. Figure 1 shows a great amount of spherical particles, 30-47 m μ large, which are similar to some viri of higher plants and to the bacteriophages. They could not be found in healthy cultures. A lysate diluted at the ratio 1 : 10 causes negative colonies (taches vierges) in chlorella cultures on agar media (Fig 2). Re-inocculations from such agar places caused a lysis of the cells. The lysating factor can regenerate. The final activity of the lysate depended on the degree of dilution of the inoculated material. Temperatures above 60° inactivate the lysate. The lysating factor has a clear adsorption capability with activated charcoal. It can, however, not pass the "Chamberlain" candle (svecha Shamberlana). Rivanol acridine and some dyes bind various viri and decrease their activity. The lysating factor of the chlorella cultures had a similar behaviour. It is specific for chlorella and cannot lyse other types of algae. The following problems remain unsolved: 1) Is the lysating agent transmitted by bacteria? 2) Are bacteria present in the culture without taking part in the lysis of the chlorella? 3) Does lysis take place in two stages,

Card 2/3

On the Lysis of Chlorella Pyrenoidosa Prinzh
Cultures

SOV/20-122-5-52/56

i. e. first some specific bacteria (not found by the authors) are lysated, and the chlorella only subsequently? There are 2 figures and 2 Soviet references.

ASSOCIATION: Institut mikrobiologii Akademii nauk SSSR (Institute of Microbiology of the Academy of Sciences, USSR)

PRESENTED: June 4, 1958, by V. N. Shaposhnikov, Academician

SUBMITTED: May 28, 1958

Card 3/3

ZAVARZINA, N.B.

Effect of antibiotics on the lysis of Chlorella pyrenoidosa Pringh
cultures. Mikrobiologija 31 no.6:1002-1006 N-D '62.

1. Institut mikrobiologii AN SSSR
(ALGAE) (ANTIBIOTICS) (BACTERIOLYSIS) (MIRA 16:3)

ZAVARZINA, N.B.

Substances inhibiting the development of *Scenedesmus quadricauda*.
Trudy Gidrobiol. ob-va 9:195-205 '59. (MIRA 12:9)

1. Institut mikrobiologii AN SSSR.
(Algae) (Growth inhibiting substances)

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S/020/61/137/002/017/020
B103/B215

AUTHOR: Zavarzina, N. B.

TITLE: Lytic agent in cultures of Chlorella pyrenoidosa Pringh

PERIODICAL: Doklady Akademii nauk SSSR, v. 137, no. 2, 1961, 435-437

TEXT: So far, the existence of a specific lytic agent in the lysis of laboratory cultures of Chlorella pyrenoidosa has been assumed but not proved, although an abundance of spherical particles was found in lysed cultures under the electron microscope. Lysis is assumed to be due to these particles. Since such cultures also contained bacteria, the author's aims were such: 1) pure cultures of Chlorella, and 2) isolation of a bacteria-free preparation of the lytic agent. A combination of these two cultures may give an idea of lysis. Anoptral microscopy of living Chlorella cultures proved to be the best method of checking the degree of purity. Ad 1): A pure culture was obtained by the spray method (Ref. 2: O.Komarova, Mikrobiologiya, 18, 370, 1949). Most filters proved unsuitable for filtering lysed Chlorella cultures, but bacteria could be filtered by

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Lytic agent in cultures of

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diaphragm filters nos. 1 and 2 of the fabrika ul'trafil'trov v Mytishchakh (Mytishchi Factory for Ultrafilters). Asbestos filters (Φ -3 and $C\Phi$ -4 (SF-3, SF-4) showed hardly reproducible results. Only few spherical particles were filtered by type SF-4; hence, the experimental results differed. However, in 6 out of 10 experiments, considerable cytological changes were observed in numerous Chlorella cells of pure cultures by adding filtered lysate (dilution of 2 : 10 and 5 : 10) after incubation of 20-50 days, even though the surface of the cultures turned slightly yellow. Damaged cells: a) vacuolated and swollen, b) division stopped in the tetrad stage: divided cells did not separate. In all cultures, part of the cells remained undamaged and viable. Since no such changes occurred in control experiments, the author concluded that they were not due to chlorellin. "Bacteria-free lysate" thus damages Chlorella cells considerably without destroying them completely. On the basis of some negative experimental results, the author assumes an insufficient content of lytic agent in the filtrate. This agent does not lose its activity at a pH of 4.5-9. Elution experiments with acidified solutions, however, yielded a

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Lytic agent in cultures of...

weakly active eluate. The author obtained much better results by using a 1% saponin solution. She also proved that lysis is not caused by proteolytic ferments which may be obtained from destroyed Chlorella or bacteria cells. Among various bacteria of the lysate, the author isolated a specific form of Caulobacter vibrioides Henrici et Johnson (identified by G. A. Zavarzin), in whose presence complete lysis took place. These bacteria developed abundantly at the moment of lysis, and continued to do so in the lysate until Chlorella was completely destroyed. Chlorella cultures could not be isolated from C. vibrioides, since these bacteria pass through diaphragm filters. After 3-5 filtrations, a pure culture grown by R. Pratt (Ref. 4: Am. J. Bot., 29, no. 2, 1942) on a mineral nutrient medium no longer caused the lysis of Chlorella. By using an electron microscope the authors proved the lysate to contain particles which morphologically resemble phage. Their spherical body, concave on one side, has a short conical appendage. These particles may stick to C. vibrioides without causing its lysis. The author assumes that C. vibrioides has the following functions in the lysis of Chlorella: 1) it carries the lytic agent; 2) it damages Chlorella involucres and makes them more easily

Card 3/4

Lytic agent in cultures of...

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B103/B215

permeable to particles of the lytic agent by sticking to them; 3) it takes part in the final destruction of Chlorella cells. Like other bacteria occurring in lysates *C. vibrioides* not infected by phage is not capable of causing lysis of Chlorella. Hence, the author concludes that the presence of bacteria cannot be the primary cause of this lysis. She thanks A. Ye. Protsenko for assistance in electron-microscopic examinations. There are 4 figures, 1 table and 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc.

ASSOCIATION: Institut mikrobiologii Akademii nauk SSSR (Institute of Microbiology of the Academy of Sciences USSR)

PRESENTED: October 13, 1960 by V. N. Shaposhnikov, Academician

SUBMITTED: October 7, 1960

Card 4/4

ZAVARZINA, N.B.

Lysis of Chlorella cultures in the absence of bacteria.
Mikrobiologija. 33 no.4:562-564 Jl-Ag '64. (MIRA 18:3)

1. Institut mikrobiologii AN SSSR.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

ZAVARZINA, Ye.I., kand. tekhn. nauk

Determining the adsorption of clays and kaolins by radioactive
tracers. Trudy NIISTroikeramiki no.21:126-132 '63.

(MIRA 17:2)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

ZAVARZINA, Ye.I.; KORDONSKAYA, R.K.

Causes of the breakdown of the glaze on storage tanks. "Stek. i ker.
18 no.11:28-32 N '61. (MIRA 15:3)
(Glazes--Corrosion)

ZAVARZINA, Ye. I.

Cand Tech Sci - (diss) "Study of the rate of reaction of electrolyte with loams and kaolins for purposes of clarifying the optimal conditions for preparation of casting dross." Moscow, 1961. 18 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Order of Lenin Moscow Chemical Technology Inst imeni D. I. Mendeleyev); 200 copies; price not given; (KL, 7-61 sup, 236)

ZAVARZINA, Ye.I., inzh.

Regular processes of the exchange of cations in the liquefaction
of ceramic suspensions. Trudy NIISstroikeramiki no.16:~~48-59~~
'60. (MIRA 15:2)

(Ceramic materials--Electric properties)
(Cations)

ZAVARZINA, Ye. I.

Determination of calcium and sodium by the tracer method in the
study of exchange adsorption. Koll. zhur. 25 no.4:431-433
Jl-Ag '63. (MIRA 17:2)

1. Nauchno-issledovatel'skiy institut stroitel'noy keramiki, Moskva.

ZAVARZINA, Ye.I.

Studying the interaction of glaze with the ceramic body by the method of tagged atoms. Stek. i ker. 17 no.10:26-30 '60.

(MIRA 13:10)

(Glazes) (Ceramics) (Radioactive tracers)

ZAVAZAL, Vl.

SAMAN, K.; ZAVAZAL, Vl., Mat.; MALÝ, Vl.

Effect of novocaine on phagocytosis. Česk. očk. 13 no.1:11-20
Feb 57.

1. Oční klinika lekarské fakulty Karlovy univerzity, pobočky v
Plzni, ředitel prof. Dr. R. Knobloch, Ustavu pro lekařskou
mikrobiologii a imunologii lekarské fakulty Karlovy univerzity,
pobočky v Plzni, ředitel doc. Dr. Vl. Wagner.

(PROCaine, eff.

on phagocytosis (O_u)

(PHAGOCYTOSIS, eff. of drugs on
procaine (O_u))

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

ZAVARZIN, S.I.

LUZHETSKIY, N.N.; POSTNOV, I.G.; SEMENOV, A.I.; ZAVARZIN, S.I.;
KOROBOV, Yu.M., redaktor; MOROZOVA, T.M., technicheskiy redaktor.

[Line supervisor of city telephone systems] Lineinyi nadzorstvchik
gorodskoi telefonnoi seti. Moskva, Gos.izd-vo lit-ry po voprosam
sviazi i radio, 1951. 394 p. (MLRA 9:1)
(Telephone)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

ZAVARZIN, S. I.

Lineynyj nadsmotrzchik gorodskoy telefonnoj seti (City telephone systems lineman, by) N. N. Luzhetskiy, I. G. Postnov, A. I. Samenov (i) S. I. Zavarzin. 2. ezi. ispr. i dop. Moskva, Svyaz'izdat, 1953. 383 p. illus., tables. "Literatura": p. (402) At head of title: Posobiya dlya svyazistov massovykh professiy.

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1953

ZAVARZIN, S.I.

LUZHETSKII, N.N.; POSTNOV, I.G.; SEMENOV, A.I.; ZAVARZIN, S.I.;
KOROBOV, Yu.M., redaktor; SOKOLOVA, R.Ya., "tekhnicheskiy re-
daktor.

[Lineman of a city telephone system] Lineinyyi nadzornyychik
gorodskoi telefonnoi seti. 2 izd., ispr. i dop. Moskva, Gos. izd-
vo lit-ry po voprosam sviazi i radio. 1953. 406 p. (MLRA 7:8)
(Telephone)

ZAVARZIN, S. I.

LUZHETSKIY, N.N.; POSTNOV, I.G.; SEMENOV, A.I.; ZAVARZIN, S.I.; KOROBOW, Yu.M., redaktor; SOKOLOVA, R.Ya., tekhnicheskij redaktor.

[City telephone system lineman] Lineinyi nadzorstvshchik gorodskoi telefonnoi seti. 2. izd., ispr. i dop. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1959. 406 p. (MIRA 7:7)
(Telephone)

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S/072/60/000/010/004/004
B021/B058

AUTHOR: Zavarzina, Ye. I.

TITLE: Investigation of the Interaction of Glazing and Body by
Means of Tagged Atoms /9

PERIODICAL: Steklo i keramika, 1960, No. 10, pp. 26 - 30

TEXT: Glazings are selected in such a way that the coefficients of thermal expansion of glazing and body are approximately equal. Moreover, it must be also known to what extent the chemical composition of glazing and body changes during firing, and how deep the individual glazing components penetrate into the body. Radioactive isotopes were used therefore. The experiments were conducted with faience mass and glazing which serve for the manufacture of faience fancy tiles (Table 1). A β -sensitive photographic film of the type MP НИКФИ (MR NIKFI) was used for these experiments. The course of the activity of the samples containing Ca⁴⁵ during the grinding-off of the glazing is displayed in Fig. 2. An increase of the firing temperature furthers a deeper penetration of calcium

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Investigation of the Interaction of Glazing
and Body by Means of Tagged Atoms

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(Table 2). The cations of calcium, barium, and iron, present in the glazing, are very mobile at high temperatures and migrate into the interior of the body. The graphic method of determining the diffusion coefficient as devised by P. L. Gruzin was used to ascertain the physico-chemical processes of this phenomenon. The penetration of the glazing components into the body represents a complicated phenomenon, as can be seen from the curves in Fig. 3. The values of the diffusion coefficients for the cations Ca, Ba, Fe are mentioned in Table 3. The influence of the admixtures on the depth of penetration of the calcium from the glazing into the body is shown in Fig. 4. The autoradiograms of the diffusion of calcium from the glazing into the body are shown in Fig. 5. Zinc-, iron-, lead-, and borax oxides increase the diffusion properties of calcium. An addition of zirconium in the glazing reduces the extent of interaction of the glazing with the body. There are 5 figures, 3 tables, and 1 Soviet reference.

✓

Card 2/2

FRANCHE, Maria; MICU, I.; BALTIEV, Ariadna; DUMITRIU, St.; FELLER, H.;
APOSTOL, A.; BRAUNER, E.; CONSTANTINESCU, N.; ZAVATE, Olga;
DOGARU, Maria; NICA, V.

Research on recurrences of exanthematous typhus. II. Comparative
clinical aspects of typhus recurrences and primary infections.
Stud. cercet. inframicrobiol. 15: no. 3: 211-224 '64.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5

ZAVATE, Olga; CONSTANTINESCU, N.; DOGARU, Maria; MORARU, Aneta; FRANCHE,
Maria; MICU, I.; BALTIEV, Ariadna

Research on recurrences of exanthematous typhus. IV.
State of rickettsemia in sporadic typhus primoinfection
and in recurrences. Stud. cercet. inframicrobiol. 15
no.3:255-267 '64.

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010005-5"

NICOLAU, St. S., acad.; CONSTANTINESCU, N.; BIRZU, N.; ZAVATE, O.; MICU, I.
TEODOROVICI, Gr.

Evolution of human rabies comparatively studied in both treated and
untreated patients with antirabic vaccine. Consecutive therapeutic
directives. Studii cerc inframicrobiol Special issue-supplement
to 12:133-143 '61.

1. Institutul de inframicrobiologie al Academiei R.P.R. si Institutul
de igiena, Iasi. 2. Membru al Comitetului de redactie si redactor
responsabil, "Studii si cercetari de inframicrobiologie" (for Nicolau).

(HYDROPHOBIA)

NICOLAU, St. S., acad.; CONSTANTINESCU, N.; CAJAL, N.; BIRZU, N.; ZAVATE, O.;
MORARU, A.

Variability of the fixed rabic virus. Comparative pathogenic and
immunogenic activity of the Pasteur and Babes strains, respectively.
Studii cerc inframicrobiol Special issue-supplement to 12:145-155
'61.

1. Institutul de inframicrobiologie al Academiei R.P.R. si Institutul
de igiena, Iasi. 2. Membru al Comitetului de redactie si redactor
responsabil, "Studii si cercetari de inframicrobiologie" (for St. S.
Nicolau). 3. Membru al Comitetului de redactie si redactor responsa-
bil adjunct, "Studii si cercetari de inframicrobiologie"(for Cajal).

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